IT Initiative Supplement

February 25, 2010

I. Project Description

Project Title: CHIMES-Medicaid Maintenance and Support

Brief Description of the Project Title: The Combined Healthcare Information in Montana Eligibility System for Medicaid (CHIMES-Medicaid) is a modern Medicaid eligibility system that replaced the Medicaid component of The Economic Assistance Management System (TEAMS), a mainframe-based system currently used to determine eligibility for the Medicaid, Food Stamps and TANF programs. The CHIMES-Medicaid system went live October 1, 2009. Enhancements and maintenance will be managed by the Technology Services Division (TSD) through a contract with an outside vendor.

Statewide Priority: 1
Agency Priority: 1
Estimated Completion Date: FY2015
IT Project Biennium: FY2010-11, FY2012-13, FY2014-15
Request Number:
Version:

Agency Number: 6901
Agency Name: DPHHS
Program Number:
Program Name: Combined Healthcare Information in Montana Eligibility System for Medicaid (CHIMES – Medicaid)

A. Type of Project (check all that apply)

Enhancement	
Replacement	
New	
O&M	**X**

B. Type of System (check all that apply)

Mid-Tier	**X**
Mainframe	
GIS	
Web	**X**
Network	
Desktop	

II. Narrative

C. Executive Summary

Project Purpose and Objectives:
The purpose of this project is to provide the availability to maintain and enhance the new CHIMES-Medicaid System on an ongoing basis, allowing staff to determine applicant eligibility for some 40 Medicaid Program coverage groups as well as the Medicare Savings programs known as QMB, SLMB and QI1. As with any new system, additional maintenance or enhancements will be required to ensure the system suits the business need after implementation. In addition, as State and Federal policies and mandates evolve, the system may have to be modified to adhere to these new policies and regulations. This is especially vital with Health Care Reform "looming", which will most likely require adjustments to the CHIMES-Medicaid System and/or business processes.

The primary objective of this project is to incorporate all Medicaid-related healthcare programs that the State of Montana has opted to implement from the Social Security Act (Title XIX, Section 1902) into one central system, introduce advanced business functionality (e.g. a business rules engine and cascading eligibility determination), and move the system off of the State mainframe. This new system employs modern technologies such as J2EE and a business rules engine that will improve the availability and quality of information necessary for the effective delivery of services to participants. It will automate further health care administration to allow Office of Public Assistance (OPA) workers to simplify processes, reduce errors, and spend the majority of their time on qualitative customer care. CHIMES-Medicaid will increase the efficiency of the collection, reporting, and analysis of data at the state program level. The opportunity also exists for cleaner client interaction and ease of use. CHIMES-Medicaid will include the following program functions:

- Data Gathering
- Eligibility Determination
- Case Management
- Reporting
- Confidentiality and Security
- Conversion
- System Interfaces
- Quality Assurance

CHIMES-Medicaid has been implemented as a J2EE web-based system with an integrated state-of-the-art business rules engine. Unlike TEAMS, CHIMES-Medicaid includes automated eligibility determination, known as cascading eligibility, which is facilitated by the rules engine. When all data are entered and budgets are calculated, CHIMES-Medicaid will display a list of potential Medicaid types for which eligibility can be established.

Technical Implementation Approach:
CHIMES-Medicaid uses a modern multi-tier Java-based architecture. CHIMES-Medicaid includes automated eligibility determination that is facilitated by a Business Rules Engine (BRE) using ILOG's JRules product. The relational database for CHIMES-Medicaid is Oracle 10g.

The technical architecture relies on the following components and technologies:

- An Oracle 10g database to persistently store application data.
- JBoss to serve as the web and application server (also sometime referred to as the "middle tier").
- Java, Second Edition, Enterprise Edition (J2EE) as the development and runtime environment, as well as to provide security-related functions in addition to those provided by the Oracle database and to be custom-developed for the system.
- JavaServer Pages as the technology to produce the dynamic User Interface (web pages) and to communicate between the user and the middle tier.
- Apache Struts, as the technology to provide the framework or underpinning for professional web-based Java development.
- Red Hat Hibernate as the technology to isolate and map the underlying Oracle relational database from the object-oriented Java development environment.
- ILOG JRules as the Business Rules Engine to perform all eligibility determination evaluations.
- XML and Adobe Acrobat as the technologies for correspondence and report generation.

Project Schedule and Milestones:

The new CHIMES-Medicaid system was implemented October 1, 2009.

Post implementation of the CHIMES-Medicaid system, any issues, defects, or desired modification will be submitted, logged, and tracked using a tracking software solution that is utilized for the systems. The post implementation modifications to the CHIMES-Medicaid system is high in volume but is expected to trend to a significantly lower volume, supporting the need for fixes on an as needed basis. It is expected that the schedule and milestones associated to CHIMES-Medicaid maintenance will be continuous due to the ongoing nature of maintenance and required changes. It is anticipated that modifications required due to State or Federal mandates, or changes to policy or procedure will occur within the timeframe allotted.

D. Business and IT Problems Addressed

The implementation of the new CHIMES-Medicaid system will provide various cost and time savings by:

- Automation of eligibility determination for multiple programs increases eligibility accuracy to optimize federal and state program expenditure.
- Expanded data collection and reporting capability for both state and federal data usage.
- Automated of the eligibility determination and issuance which benefits both clients and the administration of public assistance programs.
- Secure web-enabled access.
- Efficient and intuitive functions.
- Capturing information once and making it accessible system-wide, subject to proper authorization.
- Reduce the time and cost required to make modifications and enhancements.
- Increased accuracy of eligibility determination.
- Enhanced the effectiveness and efficiency of county eligibility staff in the face of increasing caseloads.
- Increase efficiency of the collection, reporting, and analysis of data.

- Increase ability to measure the agency's performance in providing services to our participants.
- Produce more accurate and efficient federal reporting.

E. Alternative(s)

Alternatives Considered:

Alternative 1 – Do not engage in maintenance activities for the CHIMES-Medicaid system. This alternative is not a viable option. With the implementation of a new system, not providing maintenance will most likely make the system and its automated functions unusable. In addition, with the CHIMES-Medicaid system being brand new, it is expected that changes will be required after implementation, to compensate for defects not found during testing, or business needs that have changed since the design of the system.

Alternative 2 – Allow for internal staff, such as ISB, to make the necessary modifications to the system. This alternative is not very viable, as the specific knowledge and technical expertise for the CHIMES-Medicaid system, and its interfaces is not available at ISB.

Alternative 3 – Allow for the CHIMES-Medicaid system to be maintained as part of the ITFM contract. This option provides the most benefit, as it will allow for more resource availability, to make necessary modifications to the system in a timely manner. It also ensures that the technical knowledge and skills required for maintenance to the CHIMES-Medicaid system are available. This option also ensures that no costs are associated to the system and its ongoing maintenance, unless they are needed and approved by the Department.

Rationale for Selection of Particular Alternative:

Alternative 3 is the preferred alternative, as it allows for the opportunity for maintenance of the system to occur by having the proper skills and knowledge available. In addition, this option will help to ensure that necessary maintenance can occur in a timely manner because of the availability of resources allowed via the ITFM contract. Finally, this option will allow the costs associated to be monitored and controlled by using existing processes and standards already associated the ITFM contract.

F. Narrative Detail

As of October 1, 2009, a new system was implemented to effectively administer Medicaid and Medicare Savings Program benefits to participants in a timely manner. This system is designed with various automatic functions, including various interfaces with other systems (MMIS, SEARCHS, HIPPS, Buy-In, SVES, BENDEX, SDX, CAPS, KIDS).

Changes have been required to the system post implementation. These modifications address defects not found prior to implementation, as well as changes necessary due to additional needs and opportunities not available prior to implementation.

In addition, it is necessary that the policies, procedures, and regulatory mandates that direct and govern the Medicaid program will change. The CHIMES-Medicaid system will need to be modified to address the changes, allowing the system to remain effective for the administration of Medicaid benefits in the ever changing world of health care.

The CHIMES-Medicaid System is designed to take advantage of the Department's vision of System Oriented Architecture, allowing data sharing across inter-related programs and across various divisions of the Department. The CHIMES-Medicaid system, with the interfaces and automation will increase productivity.

Because of the complexity of the CHIMES-Medicaid system, the continuous changes of regulations and mandates, it is anticipated that maintenance will be required in order to keep the system running at an optimal level, ensure the system supports the business processes and is in compliance with Federal and State policies and procedure, and will continue to provide the cost savings through time, materials, and additional resources on an ongoing basis.

III. Costs

G. Estimated Cost of Project:

Estimated Cost of Project		FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	Total
1.	Personal Services - IT Staff							0
2.	Personal Services - Non IT Staff							0
3.	Contracted Services	1,787,027	1,590,866	2,361,300	2,361,300	2,361,300	2,361,300	12,823,093
4.	ITSD Services	512,042	630,605	512,042	512,042	512,042	512,042	3,190,815
5.	Hardware							0
6.	Software	43,817		43,817	43,817	43,817	43,817	219,085
7.	Telecommunications	22,300		22,300	22,300	22,300	22,300	111,500
8.	Maintenance							0
9.	Project Management							0
10.	IV & V							0
11.	Contingency							0
12.	Training							0
13.	Other	300,651		300,651	300,651	300,651	300,651	1,503,255
Total Estimated Costs		2,665,837	2,221,471	3,240,110	3,240,110	3,240,110	3,240,110	17,847,748

Total Funding:

IV. Funding

H. Funding

Total Funding

Fund		FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	Total
1.	01100	1,285,059	1,110,736	1,620,055	1,620,055	1,620,055	1,620,055	8,876,015
2.	03598	1,380,779	1,110,736	1,620,055	1,620,055	1,620,055	1,620,055	8,971,735
3.								0
4.								0

5.							0
6.							0
Total Estimated Costs	2,665,838	2,221,471	3,240,110	3,240,110	3,240,110	3,240,110	17,847,749

Cash/Bonded:

Bill Number:

V. Cost upon Completion

1. **Operating Costs upon Completion**
   This is an ongoing effort and does not have a completion date.

   FTE:

   Personal Services Costs:

   Operating Costs:

   Maintenance Expenses:

   Total Estimated Costs:

2. **Funding Recap**
   This is an ongoing effort and does not have a completion date.

   Fund Type:

   Amount:

   Total Funding:

V. Risk Assessment

A. Current IT Infrastructure Risks

1. Current application 10+ years old? No
   Date of last major upgrade? New CHIMES-Medicaid system implemented 10/01/2009.

2. Current application is based on old technology? No
   If yes, what is the current hardware platform, operating system, and programming languages used to support the application?

3. Is the agency not capable of maintaining the current application with internal technical staff? No
   If yes, who supports the application today?

4. Other IT infrastructure risks? No
   If yes, provide further detail.

B. Current Business Risks

1. What are the risks to the state if the project is not adopted?
   a. The system will not be changed to meet the changing needs of the business.
   b. The system will not be updated to comply with State and Federal Regulations.
   c. The system will not be modified to engage in SOA.
   d. The system will lose its effectiveness and envisioned efficiencies.

2. Does the current application meet current business requirements? No
   If "no", what specific business functions does the application lack?

   The system is new, but does not incorporate new enhancements that have been submitted since implementation, such as:
   a. Death Registry Interface
   b. Health Insurance Flexibility and Accountability (HIFA) Waiver
   c. Medicaid for Disabled Working Individuals
   d. HIPPS Interface

C. Project Risk Assessment

1. Describe any major obstacles to successful implementation and discuss how those obstacles will be mitigated.

Table H Risk Assessment

Description	Severity (H/M/L)	Probability of Occurrence (%)	Estimated Cost	Mitigation Strategy
Failure to meet changes to Federal and State mandates	H	75%		Manual workarounds will be instituted for compliance purposes
Changes to related systems make inbound and outbound interfaces non-functional	H	25%		Manually enter the data or create files for data exchange to interfacing systems.
Decreases in efficiencies due to inability to modify system to meet evolving business needs	M	50%		Institute manual workarounds outside of the system